

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION II

IN THE MATTER OF
THE FRONTIER CHEMICAL SITE
NIAGARA FALLS, NEW YORK

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ABB Air Preheater, Inc.	:	
ABB Kent-Taylor	:	
ABB Traction, Inc.	:	
A.B. Chance Company	:	
ACIMI Corporation	:	
Adco Products, Inc.	:	ADMINISTRATIVE
Agway Petroleum Corporation	:	ORDER ON CONSENT
Alliance Automation Systems	:	FOR REMOVAL ACTION
Allegheny County Department of Laboratories	:	
Allentown Cement Company, Inc.	:	Index No.
Allied Sinterings, Inc.	:	II-CERCLA-93-0207
Amresco Inc.	:	
American Airlines, inc.	:	
Anheuser-Busch, Inc.	:	
Apollo Metals, Ltd.	:	
Armstrong World Industries, Inc.	:	
Athenia Wire	:	
Bailey Manufacturing Company	:	
Ballet Makers, inc.	:	
Barre Engraving Company, Inc.	:	
Battery Engineering, Inc.	:	
B.B. Greenberg	:	
Beloit Manhattan	:	
Blue Chip Products, Inc.	:	
Blue Grass Chemical Specialties, Inc.	:	
Bond Builders, Inc.	:	
Boston Coach Corporation	:	
Bridon American Corporation	:	
Brunswick Publishing Company	:	
Buckeye Pipe Line Company	:	
Buckham Transport Ltd.	:	
Bus Industries of America, Inc.	:	
Calspan Advanced Technology Center	:	
CCL Custom Manufacturing, Inc.	:	
Challenge Manufacturing	:	
Champion Products, Inc.	:	
Chemclene Corporation	:	

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(1-A)

Chemical Leaman Tank Lines, Inc. :
Chester Hoist Company :
CH Holding Corp. :
Chittenden Solid Waste District :
Chromium Corporation :
Clark Grave Vault Company :
Comfort Designs, Inc. :
Corro Therm, Inc. :
Corson Manufacturing Company :
Courier Stoughton, Inc. :
CPS Corporation :
C.R. Bard, Inc. :
Crown Metro, Inc. :
Crystal Brands, Inc. :
Custom Design Services, Inc. :
Dana Corporation :
Darworth Company :
DeGraff Memorial Hospital :
DeStefano Studios, Inc. :
Donlee Technologies, Inc. :
Donsco, Inc. :
Duncan Galvanizing :
Eastern Color and Chemical Company :
Eichelbergers, Inc. :
E.J. DelMonte Corporation :
Elco Corporation :
Eggers Industries Inc. :
E/M Corporation :
ETI Tank Cleaning :
Eureka Security Printing Company, :
Inc. :
Fancher Furniture Company :
Ferro Corporation :
Fisher Industrial Service :
Fisher-Price, Inc. :
Flint Ink Corporation :
Foamex L.P. :
Forms, Inc. :
FOSECO, Inc. :
Frick Company :
Fruehauf Trailer Corporation :
Garden Way, Inc. :
Gem Chem, Inc. :
General Chemical Corporation :
Gentex Corporation :
George Industries, Inc. :
Gichner Mobile Systems :
Giddings & Lewis, Inc. :
Gilbert Commonwealth :
Gold Medal Ladder Company :
GTE Operations Support Incorporated: :
G.W. Lisk Company, Inc. :
Handy & Harman Tube Company, Inc. :
Haskell of Pittsburgh, Inc. :

(1-B)

Hayden Environmental Group, Inc. :
H.B. Ives :
Hedstrom Corporation :
Henry R. Hinckley & Company :
Honeycomb Systems, Inc. :
Howard's Express, Inc. :
Hub Folding Box Company, Inc. :
Huntingdon Analytical Services :
Hydrosample Division of Zecco, Inc. :
II-VI Incorporated :
Imaging and Sensing Technology :
Corporation :
IMO Industries, Inc. :
Independent Cable, Inc. :
Ingersoll-Rand Company :
INX International Ink Company :
ITW Plastiglides Division :
Jessup Door Company :
JSJ Corporation :
Julian B. Slevin Company, Inc. :
Keeney Mfg. Company :
KEM Plastic Playing Cards, Inc. :
Kenmore - Town of Tonawanda Union :
Free School District :
Kensington Industries Corporation :
Keyes Fibre Company :
Keystone Carbon Company :
Kmart Corporation :
Knox Semiconductor :
Lannett Company, Inc. :
Lapp Insulator Company :
LaValley Building Supply, Inc. :
LeJeune Steel Company :
Leland Electrosystems, Inc. :
Leviton Mfg. Company :
Lewis Corporation :
Leybold Inticon :
Libralter Plastics, Inc. :
Loral Defense Systems - Akron :
Lyn Contracting Co. :
Luminite Products Corporation :
Maine Yankee Atomic Power Company :
Marc Equity Realty Associates :
MARCOR of New York, Inc. :
Markel Corporation :
Masland Industries, Inc. :
Mass Tank Disposal Corporation :
McCann Mfg. Company :
Mercersburg Tanning Corporation :
Mercury Aircraft, Inc. :
Mercy Hospital :
Meridian Products :
Metalade, Inc. :

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Metroland Printing, Publishing & Distributing :
Michigan Limestone Operations :
Michigan Maple Block Company :
Milco Industries, Inc. :
Mississippi Chemical Express, Inc. :
Montgomery wire Corporation :
Montrose Area School District :
Morgan Matroc, Electro Ceramic Division :
Murray Recon, Inc. :
National Fuel Gas Distribution Corporation :
National Sea Products, Inc. :
Nationwide Circuits :
New York State Department of Correctional Services :
New York State Department of Transportation :
Northland Corporation :
North Shore Laboratories Corporation :
Oatey Company :
Ocker & Trapp :
OI-NEG TV Products, Inc. :
Olean Advanced Products :
O'Leary Paint :
Oxford Innovations :
Pannier Corporation :
Passaic Engraving Co, Inc. :
P.A.T. Products, Inc. :
Paul B. Zimmerman, Inc. :
PCI Paper Conversions, Inc. :
Peerless - Winsmith, Inc. :
Pioneer Plastics Corp. :
Plastek Industries, Inc. :
Plating for Electronics, Inc. :
Ply Gems Industries, Inc. :
Pollution Solutions of Vermont, Inc. :
Polomyx Industries, Inc. :
Polymeric, Inc. :
Prestolite Electric Incorporated :
Printco :
Protective Closures, Inc. :
Psycho Therm :
Purolator Products Company :
QUIN-T Corporation - NH :
Ralston Purina Company :
Ramapo Catskill Library System :
Reading Rehabilitation Hospital :
Realty Engineering Company :
Remley & Company, Inc. :
Renold, Inc. :

(1-D)

Retail Printing Corp.	:
Riverdale Color Mfg., Inc.	:
Robotron Corporation	:
RTI, Inc.	:
Ryder Automotive Operations	:
Ryder Truck Rental, Inc.	:
Schwiezer Aircraft Corporation	:
Scranton Sewer Authority	:
Sebago Inc.	:
Select-Tron Industries, Inc.	:
SERONO DIAGNOSTICS, INC.	:
Shepard Niles, inc.	:
Sid Harvey Industries, Inc.	:
SIHI Pumps, Inc.	:
Simmonds Precision	:
Simon LTI	:
Sun Co. Inc., (R&M)	:
Sonoco Fibre Drum	:
Surfinco	:
Swanson Plating Company, Inc.	:
Tarkett, Inc.	:
Tech Systems	:
Teknor Apex Company	:
Teledyne McKay	:
Teleflex Incorporated	:
The Buffalo Enterprise Development	:
Corporation	:
The Dingley Press	:
The Delta Rubber Company	:
The Duriron Company, Inc.	:
The Electric Materials Company	:
The Genessee Hospital	:
The Gledhill Road Machinery Co.	:
The Lankenau Hospital	:
The McKay Press, Inc.	:
The Mead Corporation	:
The Mentholatum Company	:
The Merchants National Bank &	:
Trust Company of Syracuse	:
The Monarch Machine Tool Company	:
The Morrill Press (Division of	:
Engraph, Inc.)	:
The Naugatuck Glass Company	:
The New York, Susquehanna and	:
Western Railway Corporation	:
The Odell Company	:
The Paintworks Inc.	:
The Southeast Morris County MUA	:
Therma Tru	:
Three Dimensional Chemical	:
Corporation	:
Tighe & Bond, Inc.	:
Tivoly, Inc.	:
TODCO	:

(1-E)

TransTechnology Corporation :
Trench Manufacturing Company, Inc. :
Trico Products Corporation :
Truck-Lite Company, Inc. :
Unifirst Corporation :
United Environmental Group :
United Panel, Inc. :
VAC-AERO International, Inc. :
Vendors 1st Choice :
Vibroplating, Inc. :
Village of Westfield :
WCA Hospital :
Webasto Sunroofs, Inc. :
Westboro Field Office/Division of :
Fisheries and Wildlife :
Westinghouse Electric Corporation :
Western Maine Graphics, Inc. :
Weyerhaeuser Company :
Wilson Greatbatch Ltd. :
Wolf Printing Co., Inc. :
Xerxes Corporation :
York Modern Corporation :
ZENECA, Inc. :

Respondents. :

Proceeding Under Section 106(a) :
of the Comprehensive Environmental :
Response, Compensation, and :
Liability Act, as amended, :
42 U.S.C. §9606(a) :

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I. JURISDICTION AND GENERAL PROVISIONS

1. This Administrative Order on Consent ("Order") is entered into voluntarily by the United States Environmental Protection Agency ("EPA") and the above-captioned Respondents ("Respondents"). This Order provides for the performance of a removal action by Respondents and the reimbursement of certain costs incurred by EPA in connection with the Frontier Chemical Site ("Site"), which is located at 4626 Royal Avenue in Niagara Falls, Niagara County, New York.
2. This Order is issued pursuant to the authority vested in the President of the United States by Section 106(a) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended ("CERCLA"), 42 U.S.C. § 9606(a), and delegated to the Administrator of EPA on January 23, 1987, by Executive Order No. 12580 (52 Federal Register 2926, January 29, 1987) and further delegated to the EPA Regional Administrators by EPA Delegation Nos. 14-14-A and 14-14-C.
3. EPA has notified the New York State Department of Environmental Conservation ("NYSDEC") of this Order pursuant to Section 106(a) of CERCLA, 42 U.S.C. § 9606(a).
4. Respondents' participation in this Order shall not constitute or be construed as an admission of liability or of EPA's findings or determinations contained in this Order. Respondents agree to comply with and be bound by the terms of this Order. Respondents further agree that they will not contest the validity of this Order or its terms in any proceeding to enforce the terms of this Order.

II. PARTIES BOUND

5. This Order applies to and is binding upon Respondents and their successors and assigns. Respondents agree to instruct their officers, directors, employees and agents involved in the performance of the Work required by this Order to cooperate in carrying out Respondents' obligations under this Order. Respondents agree that their officers, directors, employees, and agents involved in the performance of the Work required by this Order shall take all necessary steps to accomplish the performance of said Work in accordance with this Order. The individual who has signed this Order on behalf of each Respondent certifies that he or she is authorized to bind that Respondent to this Order. Any change in the ownership or corporate status of a Respondent, including, but not limited to, any transfer of assets or real or personal property, shall not alter the responsibilities of any of the Respondents under this Order. Respondents are jointly and severally responsible for carrying out all activities required by this Order. Compliance or noncompliance by one or more Respondent(s) with any provision of

this Order shall not excuse or justify noncompliance by any other Respondents.

6. A Respondent shall provide a copy of this Order to any prospective owners or successors before a controlling interest in said Respondents' assets, property rights, or stock are transferred to the prospective owner or successor.

7. Not later than sixty (60) days prior to the transfer by a Respondent of any real property interest in any property included within the Site, said Respondent shall submit a true and correct copy of the transfer document(s) to EPA, and shall identify the transferee by name, principal business address and effective date of the transfer.

III. DEFINITIONS

8. Unless otherwise expressly provided herein, terms used in this Order which are defined in CERCLA or in regulations promulgated under CERCLA shall have the meaning assigned to them in CERCLA or its implementing regulations. Whenever terms listed below are used in this Order or in an attachment to this Order, the following definitions shall apply:

a. "Day" means a calendar day unless otherwise expressly stated. "Working day" shall mean a day other than a Saturday, Sunday, or Federal holiday. In computing any period of time under this Order, where the last day would fall on a Saturday, Sunday, or Federal Holiday, the period shall run until the close of business on the next working day.

b. "Hazardous substance" shall have the meaning provided in Section 101(14) of CERCLA, 42 U.S.C. §9601(14).

c. "Party" or "Parties" means the United States Environmental Protection Agency and/or Respondents.

d. "Waste" means (1) any "hazardous substance" under Section 101(14) of CERCLA, 42 U.S.C. § 9601(14); (2) any "pollutant or contaminant" under Section 101(33) of CERCLA, 42 U.S.C. § 9601(33); (3) any "solid waste" under Section 1004(27) of the Resource Conservation and Recovery Act ("RCRA"), 42 U.S.C. § 6903(27); and (4) any mixture containing any of the constituents noted in (1), (2) or (3), above.

e. "Work" means all work and other activities required by and pursuant to this Order. This Order is not intended to address cleanup of waste tanks or a remedial investigation/feasibility study at the Site. That work and any other additional work unrelated to drum removal may be the subject of a future administrative order or other enforcement activity by EPA.

IV. FINDINGS OF FACT AND CONCLUSIONS OF LAW

9. The Site is located at 4626 Royal Avenue in Niagara Falls, Niagara County, New York. The Site includes a former hazardous waste processing facility located within a heavily industrialized section of Niagara Falls. It includes a portion of the property represented on the Lockport, New York Tax Map as Lots 47 and 48, Parcels A and B (the "Site Property"). The Site includes approximately 9.7 acres.

10. The Site Property is owned by Francis Williams, James H. Williams and Lawrence Reger, formerly doing business under the name of Niagara Industrial Warehousing and currently doing business under the name of Marc Equity Realty Associates. Marc Equity Realty Associates and the aforementioned three individuals are "responsible parties" within the meaning of Section 107(a)(1) of CERCLA, 42 U.S.C. § 9607(a)(1).

11. Frontier Chemical Waste Process, Inc. ("Frontier"), a corporation organized and existing under the laws of the State of New York, leased the Site Property and, from 1974 until 1992, operated a business there which was primarily engaged in hazardous waste processing/management, including wastewater treatment, fuels blending and bulking for off-site disposal.

12. Frontier was an operator of the Site at the time of disposal of hazardous substances at the Site. Accordingly, Frontier is a responsible party under Section 107(a)(2) of CERCLA, 42 U.S.C. §9607(a)(2).

13. During the course of its operations Frontier was the subject of numerous consent orders issued by NYSDEC for regulatory violations.

14. On or about August 13, 1991, Eagle Vision Environmental Inc. ("Eagle Vision"), a Colorado-chartered, Florida-based corporation, assumed responsibility for the day-to-day management of operations at the Site. Eagle Vision was an operator of the Site at the time of disposal of hazardous substances at the Site. Accordingly, Eagle Vision is a responsible party under Section 107(a)(2) of CERCLA, 42 U.S.C. § 9607(a)(2).

15. On December 4, 1992, the NYSDEC Commissioner, Thomas C. Jorling, signed a "Modification to Summary Abatement Order and Notice of Hearing" (hereinafter, "NYSDEC Order") pertaining to the Site. The NYSDEC Order required Frontier and Eagle Vision to submit a schedule for the removal of all waste from the Site, to submit Demolition and Closure Plans for particular buildings at the Site and to establish escrow accounts for security against non-payment of utility bills and employee salaries within a fixed amount of time or close the facility. The NYSDEC Order also enabled NYSDEC to initiate an emergency removal action conducted

by either NYSDEC or EPA in the event that the parties failed to meet the terms of the NYSDEC Order. Frontier waived its right to a hearing and Eagle Vision subsequently notified NYSDEC that it was not able to comply with the terms of the NYSDEC Order. NYSDEC issued a Right to Invoke Action ("RIA") based upon Frontier and Eagle Vision's noncompliance with the terms of the NYSDEC Order. The RIA stated that NYSDEC and EPA were invoking their right to enter the facility and initiate appropriate emergency removal actions. Frontier personnel at the Site were told by EPA to vacate the premises.

16. There are approximately 4,086 drums at the Site. The drums contain hazardous substances, including, but not limited to, lead, chromium, methyl ethyl ketone, barium, selenium, chlordane and lindane. There are also approximately 6,700 pounds of laboratory chemicals at the Site which contain hazardous substances including, but not limited to, cadmium carbonate, copper cyanide, lead nitrate, lead peroxide, mercuric chloride, mercuric oxide, perchloric acid, phenol, potassium cyanide, silver nitrate, and sodium perchlorate. Approximately 50% of the laboratory chemicals are in liquid form.

17. Actual releases of hazardous substances have occurred at the Site and there is a continuing threat of releases from barrels at the Site. For example, on January 6, 1993, EPA documented a leak of waste sodium hydroxide solution, a corrosive material, from a 55-gallon drum. On February 8, 1993, a hazardous waste liquid leaked from drum number 69. On February 14, 1993, there were two documented releases of flammable liquids from drums at the Site. EPA has overpacked these leaking drums.

18. EPA is currently performing activities at the Site which are essential to Site maintenance. These activities include maintaining boilers that supply steam to the steam tracer lines, process lines and heat to the drum storage buildings; maintaining compressors which are essential to the fire control system on-site; pumping storm waters from containment areas through the on-site carbon absorption system and into storage tanks, pending approval for discharge; and performing regularly scheduled inspections to examine the structural integrity of drums and tanks. When contents are observed emanating from a drum, the drum is quickly overpacked and the spill is cleaned up.

19. EPA has information which indicates that each of the Respondents listed in the above caption, other than Frontier, Eagle Vision, and the Respondents named in paragraph 10, above, arranged for the treatment or disposal of hazardous substances that were disposed of or came to be located at the Site and are therefore responsible parties pursuant to Section 107(a)(3) of CERCLA, 42 U.S.C §9607(a)(3).

20. Exposure to the various hazardous substances present at the Site by direct contact, inhalation, or ingestion may cause a

variety of adverse human health effects.

21. The Respondents have been given the opportunity to discuss with EPA the basis for issuance of this Order and its terms.

22. The Site constitutes a "facility" within the meaning of Section 101(9) of CERCLA, 42 U.S.C. § 9601(9).

23. Respondents are "persons" within the meaning of Section 101(21) of CERCLA, 42 U.S.C. § 9601(21).

V. DETERMINATIONS

24. The conditions present at the Site constitute a threat to public health, welfare, or the environment based upon factors set forth in Section 300.415(b)(2) of the NCP. These factors include, but are not limited to, actual or potential exposure to nearby human populations and hazardous substances in drums and other containers that may pose a threat of release.

25. The actual or threatened release of hazardous substances from the Site may present an imminent and substantial endangerment to the public health, welfare, or the environment within the meaning of Section 106(a) of CERCLA, 42 U.S.C. § 9606(a).

26. The actions required by this Order are necessary to protect the public health or welfare or the environment, are in the public interest, and are consistent with CERCLA and the National Contingency Plan ("NCP"), 40 CFR Part 300.

VI. ORDER

27. Based upon the foregoing Findings of Fact, Conclusions of Law, Determinations, and other information available to EPA, it is hereby ordered and agreed that Respondents shall undertake a response action at the Site in accordance with the requirements specified below. All activities specified below shall be initiated and completed as soon as possible even though maximum time periods for their completion are specified herein.

Designation of Contractor and Project Coordinator

28. Within five (5) days after the effective date of this Order, the Respondents shall select a Project Coordinator and submit the proposed Project Coordinator's name, address, telephone number, and qualifications to EPA. The Project Coordinator shall be responsible for oversight of the implementation of this Order. To the greatest extent possible, the Project Coordinator shall be present on Site or readily available during Site work. EPA retains the right to disapprove of any Project Coordinator

proposed by Respondents based upon the Project Coordinator's technical background and experience. If EPA disapproves of a proposed Project Coordinator, Respondents shall propose a different Project Coordinator and shall notify EPA of that person's name, address, telephone number, and qualifications within seven (7) days following EPA's disapproval. Receipt by Respondents' approved Project Coordinator of any notice or communication from EPA relating to this Order shall constitute receipt by Respondents. Respondents may change their designated Project Coordinator, subject to approval by EPA as set forth in this paragraph. Respondents shall notify EPA at least seven (7) days before such a change is made. The initial notification may be orally made but it shall be promptly followed by a written notice.

29. Respondents shall retain a contractor to perform the Work. Respondents shall notify EPA of the name and qualifications of a proposed contractor within fourteen (14) days of the effective date of this Order. Respondents shall also notify EPA of the name and qualifications of any other contractor or subcontractor proposed to perform work under this Order at least ten (10) days prior to commencement of such work.

30. EPA retains the right to disapprove of any, or all, of the contractors and/or subcontractors proposed by the Respondents to conduct the Work based upon the contractor's or subcontractor's technical background and experience. If EPA disapproves of any of Respondents' proposed contractors to conduct the Work, Respondents shall propose a different contractor within seven (7) days of EPA's disapproval.

31. Respondents shall provide a copy of this Order to each contractor and subcontractor approved and retained to perform the work required by this Order. Respondents shall include in all contracts or subcontracts entered into for work required under this Order provisions stating that such contractors or subcontractors, including their agents and employees, shall perform activities required by such contracts or subcontracts in compliance with this Order and all applicable laws and regulations. Respondents shall be responsible for ensuring that its contractors and subcontractors perform the work contemplated herein in accordance with this Order.

32. Respondents shall direct all submissions required by this Order to the EPA On-Scene Coordinator by certified mail at the address provided in paragraph 49.

Description of Work

33. Within thirty (30) days of the effective date of this Order, Respondents shall submit to EPA for review and approval a detailed work plan (hereinafter, the "Work Plan")

containing, at a minimum, the components and information specified below:

- a) A detailed time schedule for performance of specific tasks and for submitting plans and reports to EPA, as set forth in this Order; and a detailed description of how these tasks will be accomplished.
- b) Detailed procedures and methods to be implemented to locate and sample all Respondent's drums at the Site through the submission and implementation of a detailed sampling and analysis plan ("S&A Plan"). The S&A Plan should include procedures set forth in "Test Methods for Evaluating Solid Wastes" ("SW-846") (November, 1986, or as updated) for sampling and testing, as required by EPA, of all the drums at the Site. Procedures for the S&A Plan shall include testing for compatibility and disposal characteristics, as needed, in order to determine proper treatment and disposal methods for each category of waste found. The S&A Plan shall be completed in accordance with, but not limited to, applicable methods as specified in the following EPA published documents: "Guidance Document for Cleanup of Surface Tank and Drum Sites" (May, 1985); Drum Handling Practices at Hazardous Waste Sites" (January, 1986); "Characterization of Hazardous Waste Sites - A Methods Manual, Volume I - Site Characterization, and Volume II - Available Sampling Methods" (August, 1985 and December, 1984); "Preparation of Soil Sampling Protocol: Techniques and Strategies" (August, 1985) and SW-846.
- c) If deemed appropriate by Respondents, procedures for bulking, stabilization, and/or solidification of all drum contents and laboratory chemicals as warranted; and the steps to determine if bulking and solidification are recommended.
- d) Procedures for removal of all laboratory chemicals, including, but not limited to, 5 gallon pails, Frontier chemical samples, lab reagents, and any other chemical compounds associated with the maintenance of the facility.
- e) A plan for staging of all drums and laboratory chemicals at the Site prior to shipment off-Site, including:
 - i). measures to prevent the exposure of the waste to the elements and nearby population; and
 - ii). construction of a containment system, or use and

operation of pre-existing containment system to prevent spillage, runoff, and run-on (e.g., dike, berm).

- f) Plans for disposal of all drums at the Site identified by EPA or identified pursuant to subparagraph (c) above. Waste profile forms shall be completed for all drums leaving the Site, including but not limited to all bulked drums. The bulked drums must be weighed upon departure from the Site and upon arrival at the EPA-permitted treatment/disposal facility.
- g) Procedures for decontamination, crushing, and disposal of empty drums currently existing at the Site, or generated from bulking operations, if applicable.
- h) Decontamination procedures for expendable and nonexpendable contractor equipment.
- i) A Quality Assurance/Quality Control ("QA/QC") Plan and a description of Chain of Custody Procedures to be followed, which shall satisfy the following requirements:
 - i). The QA/QC Plan shall be completed in accordance with Section 10 of SW-846, and "Guidance for Preparation of Combined Work/Quality Assurance Project Plans for Environmental Monitoring" (U.S. EPA, Office of Water Regulations and Standards, May, 1984);
 - ii). The Respondents shall use QA/QC procedures in accordance with the QA/QC Plan submitted and approved by EPA pursuant to this Order and shall use standard EPA Chain of Custody procedures, as set forth in the National Enforcement Investigations Center Policies and Procedures Manual, as revised in November, 1984, and the National Enforcement Investigations Center Manual for the Evidence Audit, published in September, 1981, and SW-846, for all sample collection and analysis activities conducted pursuant to this Order; and
 - iii). If performance of any subsequent phase of the work required by this Order requires alteration of the QA/QC Plan, Respondents shall submit to EPA for review and approval proposed amendments to the QA/QC Plan.
- k) A Health and Safety Plan, which shall satisfy the requirements of 29 CFR Part 1910.120, Hazardous Waste Operations Standards, and EPA's "Standard Operating Safety Guides" (OSWER, 1988). If performance of any subsequent phase of the work required by this Order

requires alteration of the Health and Safety Plan, Respondents shall submit to EPA for review and approval proposed amendments to the Health and Safety Plan.

34. EPA either will approve the Work Plan, or will require modifications thereto pursuant to paragraphs 43-45, below. Upon its approval by EPA, the Work Plan shall be deemed to be incorporated into and an enforceable part of this Order.

35. Within ten (10) days after EPA's approval of the Work Plan, Respondents shall commence implementation of the EPA-approved Work Plan. Respondents shall fully implement the EPA-approved Work Plan in accordance with the terms and schedule therein and in accordance with this Order.

36. Respondents shall notify EPA of the names and addresses of all off-Site waste treatment, storage, or disposal facilities selected by Respondents to receive wastes from the Site. Respondents shall provide such notification to EPA at least five (5) days prior to off-Site shipment of such wastes.

37. At the time of completion of all activities required by this Order, demobilization shall include sampling if deemed necessary by EPA, and proper disposal or decontamination of protective clothing, remaining laboratory samples taken pursuant to this Order, and any equipment or structures constructed to facilitate the cleanup.

On-scene Coordinator, Other Personnel, and Modifications
to EPA-Approved Work Plan

38. All activities required of Respondents under the terms of this Order shall be performed only by qualified persons possessing all necessary permits, licenses, and other authorizations required by federal, state, and local governments, and all work conducted pursuant to this Order shall be performed in accordance with prevailing professional standards.

39. The current EPA On-Scene Coordinator ("OSC") for the Site is: Kevin Matheis, Removal Action Branch, Emergency and Remedial Response Division, U.S. Environmental Protection Agency, 2890 Woodbridge Avenue, Building 209 (MS-211), Edison, N.J. 08837, (908) 321-6789. EPA will notify the Designated Coordinator if EPA's On-Scene Coordinator should change.

40. EPA, including the OSC, will conduct oversight of the implementation of this Order. The OSC shall have the authority vested in an OSC by the NCP, including the authority to halt, conduct, or direct any work required by this Order, or to direct

any other response action undertaken by EPA or Respondents at the Site consistent with paragraph 33 of this Order. Absence of the OSC from the Site shall not be cause for stoppage of work unless specifically directed by the OSC.

41. As appropriate during the course of implementation of the actions required of Respondents pursuant to this Order, Respondents or their consultants or contractors, acting through the Designated Coordinator, may confer with EPA concerning the required actions. Based upon new circumstances or new information not in the possession of EPA on the date of this Order, the Designated Coordinator may request, in writing, EPA approval of modification(s) to the EPA-approved Work Plan. Only modifications approved by EPA in writing shall be deemed effective. Upon approval by EPA, such modifications shall be deemed incorporated in this Order and shall be implemented by Respondents.

Plans and Reports Requiring EPA Approval

42. If EPA disapproves or otherwise requires any modifications to any plan, report or other item required to be submitted to EPA for approval pursuant to this Order, Respondents shall have fourteen (14) days from the receipt of notice of such disapproval or the required modifications to correct any deficiencies and resubmit the plan, report, or other written document to EPA for approval, unless a shorter or longer period is specified in the notice. Any notice of disapproval will include an explanation of why the plan, report, or other item is being disapproved. Respondents shall address each of the comments and resubmit the plan, report, or other item with the required changes within the time stated above. At such time as EPA determines that the plan, report, or other item is acceptable, EPA will transmit to Respondents a written statement to that effect.

43. If any plan, report, or other item required to be submitted to EPA for approval pursuant to this Order is disapproved by EPA, even after being resubmitted following Respondents' receipt of EPA's comments on the initial submittal, Respondents shall be deemed to be out of compliance with this Order. If any resubmitted plan, report, or other item, or portion thereof, is not responsive to EPA's comments and is disapproved by EPA, EPA may again direct Respondents to make the necessary modifications thereto, and/or EPA may amend or develop the item(s) and recover the costs from Respondents of doing so. Respondents shall implement any such item(s) as amended or developed by EPA.

44. EPA shall be the final arbiter in any dispute regarding the sufficiency or acceptability of all documents submitted and all activities performed pursuant to this Order. EPA may modify

those documents and/or perform or require the performance of additional work unilaterally.

45. All plans, reports and other submittals required to be submitted to EPA pursuant to this Order, upon approval by EPA, shall be deemed to be incorporated in and an enforceable part of this Order.

Reporting

46. During the implementation of this Order, Respondents shall provide written progress reports to EPA every two weeks which fully describe all actions and activities undertaken pursuant to this Order. Such progress reports shall, among other things, (a) describe the actions taken toward achieving compliance with this Order during the previous two-week period, (b) include all results of sampling and tests and all other data received by Respondents during that period in the implementation of the Work required hereunder, (c) describe all actions which are scheduled for the next two-week period, (d) provide other information relating to the progress of work as is customary in the industry, (e) and include information regarding percentage of completion, all delays encountered or anticipated that may affect the future schedule for completion of the Work required hereunder, and a description of all efforts made to mitigate those delays or anticipated delays.

47. Respondents shall include in the biweekly progress reports required in paragraph 46, above, a schedule for the field activities which are expected to occur pursuant to this Order during the upcoming month. Respondents shall, in addition, provide EPA with at least one week advance notice of any change in that schedule.

48. The Final Report referred to in paragraph 50, below, and other documents submitted by Respondents to EPA which purport to document Respondents' compliance with the terms of this Order shall be signed by a responsible official of one or more of the Respondents or by the Project Coordinator who has been delegated this responsibility by the Respondents and whose qualifications have been found by EPA to be acceptable pursuant to paragraph 28 of this Order. For purposes of this paragraph, a responsible official is an official who is in charge of a principal business function.

49. The Work Plan, the Final Report, and other documents required to be submitted to EPA under this Order shall be sent to the following addressees:

3 copies to:

Kevin Matheis
U.S. Environmental Protection Agency
2890 Woodbridge Avenue
Bldg. 209 (MS-211)
Edison, NJ 08837
Attention: Frontier Chemical Site On-Scene
Coordinator

1 copy to:

Chief, New York/Caribbean Superfund Branch
Office of Regional Counsel
United States Environmental Protection Agency
26 Federal Plaza, Room 437
New York, New York 10278

Attention: Frontier Chemical Site Attorney

2 copies to:

Michael O'Toole, P.E.
Director, Hazardous Waste Remediation
New York State Department of Environmental
Conservation
50 Wolf Road, Room 212
Albany, New York 12233-7010
Attention: Frontier Chemical Site

50. Within thirty (30) days after completion of all removal activities required under this Order, Respondents shall submit for EPA review and approval a Final Report summarizing the actions taken to comply with this Order. The Final Report shall conform, at a minimum, with the requirements set forth in Section 300.165 of the NCP, entitled "OSC Reports." The Final Report shall include:

- a. a synopsis of all Work performed under this Order;
- b. a detailed description of all EPA-approved modifications to the Work Plan which occurred during Respondents' performance of the Work required under this Order;
- c. a listing of quantities and types of materials removed from the Site or handled on-Site;
- d. a discussion of removal and disposal options considered for those materials;
- e. a listing of the ultimate destination of those

materials;

f. a presentation of the analytical results of all sampling and analyses performed, including QA/QC data and chain of custody records;

g. accompanying appendices containing all relevant documentation generated during the work (e.g., manifests, invoices, bills, contracts, and permits).

h. an accounting of expenses incurred by the Respondents at the Site.

i. The following certification signed by a person who supervised or directed the preparation of the Final Report:

"I certify that the information contained in and accompanying this certification is true, accurate, and complete."

51. EPA either will approve the Final Report or will require modifications thereto pursuant to paragraphs 43-45, above.

Oversight

52. During the implementation of the requirements of this Order, Respondents and their contractor(s) and subcontractors shall be available for such conferences with EPA and inspections by EPA or its authorized representatives as EPA may determine are necessary to adequately oversee the work being carried out or to be carried out by Respondents, including inspections at the Site and at laboratories where analytical work is being done hereunder.

53. Respondents and their employees, agents, contractor(s) and consultant(s) shall cooperate with EPA in its efforts to oversee Respondents' implementation of this Order.

Community Relations

54. Respondents shall cooperate with EPA in providing information relating to the work required hereunder to the public. As requested by EPA, the Respondents shall participate in the preparation of all appropriate information disseminated to the public; participate in public meetings which may be held or sponsored by EPA to explain activities at or concerning the Site; and provide a suitable location for public meetings, as needed.

Access to Property and Information

55. EPA, NYSDEC and their designated representatives, including, but not limited to, employees, agents, contractor(s) and consultant(s) thereof, shall be permitted to observe the Work carried out pursuant to this Order. Respondents shall at all times permit EPA, NYSDEC, and their designated representatives full access to and freedom of movement at the Site and any other premises where Work under this Order is to be performed for purposes of inspecting or observing Respondents' progress in implementing the requirements of this Order, verifying the information submitted to EPA by Respondents, conducting investigations relating to contamination at the Site, or for any other purpose EPA determines to be reasonably related to EPA oversight of the implementation of this Order.

56. In the event that action under this Order is to be performed in areas owned by or in possession of someone other than Respondents, Respondents shall use their best efforts to obtain access agreements from the present owners within twenty (20) days of the effective date of this Order for purposes of implementing the requirements of this Order. Such agreements shall provide access not only for Respondents, but also for EPA and its designated representatives or agents, as well as NYSDEC and its designated representatives or agents. Such agreements shall specify that Respondents are not EPA's representatives with respect to liability associated with Site activities. If such access agreements are not obtained by Respondents within the time period specified herein, Respondents shall immediately notify EPA of their failure to obtain access and shall include in that notification a summary of the steps Respondents have taken to attempt to obtain access. Subject to the United States' non-reviewable discretion, EPA may use its legal authorities to obtain access for Respondents, may perform those response actions with EPA contractors at the property in question, or may terminate the Order if Respondents cannot obtain access agreements. If EPA performs those tasks or activities with EPA contractors and does not terminate the Order, Respondents shall perform all other activities not requiring access to that property. Respondents shall integrate the results of any such tasks undertaken by EPA into its reports and deliverables.

57. Upon Request, Respondents shall provide EPA with access to all records and documentation related to the conditions at the Site, hazardous substances found at or released from the Site, and the actions conducted pursuant to this Order except for those items subject to the attorney-client or work product privilege. Privileges shall not be deemed waived by the sharing of information among the Respondents, their agents, or contractors. Nothing herein shall preclude the Respondents from asserting a business confidentiality claim pursuant to 40 C.F.R. Part 2, Subpart B. All data, information and records created, maintained, or received by Respondents or their contractor(s) or

consultant(s) in connection with implementation of the Work under this Order, including, but not limited to, contractual documents, invoices, receipts, work orders and disposal records shall, without delay, be made available to EPA upon request, subject to the same privileges specified above in this paragraph. EPA shall be permitted to copy all such documents. Respondents shall submit to EPA upon receipt the results of all sampling or tests and all other technical data generated by Respondents or their contractor(s), or on the Respondents' behalf, in connection with the implementation of this Order.

58. Upon prior request by EPA, Respondents shall provide EPA or its designated representatives with duplicate and/or split samples of any material sampled in connection with the implementation of this Order.

59. Notwithstanding any other provision of this Order, EPA hereby retains all of its information gathering, access, and inspection authority under CERCLA, RCRA, and any other applicable statute or regulations.

Record Retention, Documentation, Availability of Information

60. Respondents shall preserve all documents and information relating to Work performed under this Order, or relating to the hazardous substances found on or released from the Site, for six years after completion of the Work required by this Order without either the express written approval of EPA to destroy such information or a written offer by Respondents to provide such information to EPA followed by EPA's written rejection of that offer. At the end of the six year period, Respondents shall notify EPA thirty (30) days before any such document or information is destroyed. Upon request, Respondents shall provide EPA with the originals or copies of such documents and information.

61. All documents submitted by Respondents to EPA in the course of implementing this Order shall be available to the public unless identified as confidential by Respondents pursuant to 40 CFR Part 2, Subpart B, and determined by EPA to merit treatment as confidential business information in accordance with applicable law. In addition, EPA may release all such documents to NYSDEC, and NYSDEC may make those documents available to the public unless Respondents conform with applicable New York law and regulations regarding confidentiality. Respondents shall not assert a claim of confidentiality regarding any monitoring or hydrogeologic data, any information specified under Section 104(e)(7)(F) of CERCLA, or any other chemical, scientific or engineering data relating to the Work performed hereunder.

Off-Site Shipments

62. All hazardous substances, pollutants, or contaminants removed from the Site pursuant to this Order for off-site treatment, storage, or disposal shall be treated, stored, or disposed of in compliance with (a) Section 121(d)(3) of CERCLA, 42 U.S.C. §9621(d)(3), (b) the EPA "Revised Procedures for Implementing Off-Site Response Actions," OSWER Directive Number 9834.11, November 13, 1987, (c) the EPA "Superfund Removal Procedures" (OSWER 1988), (d) RCRA, (e) the Toxic Substances Control Act ("TSCA"), 15 U.S.C. §2601, et seq., and (f) all other applicable federal and state requirements.

63. If hazardous substances from the Site are to be shipped outside of New York State, Respondents shall provide prior notification of such out-of-state waste shipments in accordance with OSWER Directive 9330.2-07. At least five (5) working days prior to out-of-state waste shipments, Respondents shall notify the environmental agency of the accepting state of the following: (a) the name and location of the facility to which the wastes are to be shipped; (b) the type and quantity of waste to be shipped; (c) the expected schedule for the waste shipments; (d) the method of transportation and name of transporter; and (e) treatment and/or disposal method of the waste streams.

64. Certificates of destruction for wastes that are destroyed must be provided to EPA upon Respondents' receipt of such. These certificates must be included in the biweekly progress reports.

Compliance With Other Laws

65. All actions required pursuant to this Order shall be performed in accordance with all applicable local, state, and federal laws and regulations except as provided in CERCLA §121(e)(1), 42 U.S.C. §9621(e)(1), and 40 CFR §300.415(i). In accordance with 40 CFR §300.415(i), all on-Site actions required pursuant to this Order shall, to the extent practicable, as determined by EPA, considering the exigencies of the situation, attain applicable or relevant and appropriate requirements ("ARARs") under federal environmental or state environmental or facility siting laws. (See "Superfund Removal Procedures: Guidance on the Consideration of ARARs During Removal Actions," OSWER Directive No. 9360.3-02, August 1991).

66. Except as provided in Section 121(e)(1) of CERCLA, 42 U.S.C. §9621(e)(1), and the NCP, no permit shall be required for any portion of the Work required hereunder that is conducted entirely on-Site. Where any portion of the Work requires a federal or state permit or approval, Respondents shall submit timely applications and shall take all other actions necessary to obtain and to comply with all such permits or approvals. This Order is not, nor shall it be construed to be, a permit issued pursuant to any federal or state statute or regulation.

Emergency Response and Notification of Releases

67. Upon the occurrence of any event during performance of the Work required hereunder which, pursuant to Section 103 of CERCLA, 42 U.S.C. §9603, requires reporting to the National Response Center [(800) 424-8802], Respondents shall immediately orally notify the Chief of the Removal Action Branch of the Emergency and Remedial Response Division of EPA, Region II, at (908) 321-6621, or the EPA Region II Emergency 24-hour Hot Line at (908) 548-8730, of the incident or Site conditions. Respondents shall also submit a written report to EPA within seven (7) days after the onset of such an event, setting forth the events that occurred and the measures taken or to be taken, if any, to mitigate any release or endangerment caused or threatened by the release and to prevent the reoccurrence of such a release. The reporting requirements of this paragraph are in addition to, not in lieu of, reporting under CERCLA Section 103, 42 U.S.C. §9603, and Section 304 of the Emergency Planning and Community Right-To-Know Act of 1986, 42 U.S.C. § 11004.

68. In the event of any action or occurrence during Respondents' performance of the requirements of this Order which causes or threatens to cause a release of a hazardous substance or which may present an immediate threat to public health or welfare or the environment, Respondents shall immediately take all appropriate action to prevent, abate, or minimize the threat if that threat is related to the Work described in paragraph 33 of this Order and shall immediately notify EPA as provided in the preceding paragraph. Respondents shall take such action in accordance with applicable provisions of this Order including, but not limited to, the Health and Safety Plan. In the event that EPA determines that (a) the activities performed pursuant to this Order, (b) significant changes in conditions at the Site, or (c) emergency circumstances occurring at the Site pose a threat to human health or the environment, EPA may direct Respondents to stop further implementation of any actions pursuant to this Order or to take other and further actions reasonably necessary to abate the threat.

69. Nothing in the preceding paragraph shall be deemed to limit any authority of the United States to take, direct, or order all appropriate action to protect human health and the environment or to prevent, abate, or minimize an actual or threatened release of hazardous substances on, at, or from the Site.

Reimbursement of Costs

70. Notwithstanding any payments of past costs made by Entech Corporation pursuant to paragraph 96, hereof, within thirty (30) days after receiving EPA's written notification of completion of the Work pursuant to Paragraph 90 of this Order, Respondents shall pay \$519,219.03, which amount represents half of EPA's past costs included in EPA's financial management system as of August

17, 1993 plus interest, to EPA in reimbursement of EPA's Past Response Costs. EPA reserves the right to recover the remaining past costs from the Respondents to this Order. Interest shall accrue at the rate of interest on investments of the Hazardous Substances Superfund in accordance with Section 107(a) of CERCLA. For purposes of this paragraph and the following paragraph, "Past Response Costs" means all direct and indirect costs that EPA has incurred and paid with respect to the Site through August 17, 1993. This payment shall be made by cashier's or certified check and shall be made payable to the "Hazardous Substance Superfund."

71. Respondents also hereby agree to reimburse EPA for Future Response Costs. For purposes of this paragraph, "Future Response Costs" means: (a) all direct and indirect costs incurred by EPA in overseeing Respondents' implementation of the Work defined in paragraph 8(e) of this Order and other requirements of this Order until the date of EPA's written notification pursuant to paragraph 96 of this Order that the Work has been completed; (b) all direct and indirect costs incurred by EPA in sampling drums other than those drums included in paragraph 33(b) of this Order; (c) all direct and indirect costs incurred by EPA in connection with obtaining access for Respondents in accordance with paragraph 56, above; (d) all direct and indirect costs incurred by EPA in connection with providing Site security; (e) all other direct and indirect costs incurred by EPA in connection with the implementation of this Order. In addition, Respondents shall pay 50% of (f) all direct and indirect costs incurred and paid by EPA with respect to the Site between August 17, 1993 and the effective date of this Order; and 50% of (g) all direct and indirect costs incurred by EPA in performing maintenance of the Site. EPA reserves the right to recover the remaining Future Response Costs from the Respondents to this Order. Respondents will also pay all interest which has accrued or which accrues in the future, consistent with Section 107(a) of CERCLA, on EPA's Past Response Costs and the costs referred to in subparagraphs (a) through (g) above. EPA will periodically send billings to Respondents for Future Response Costs. The billings will be accompanied by a printout of cost data in EPA's financial management system and by a calculation of EPA's indirect costs. Respondents shall, within thirty (30) days of receipt of each such billing, remit a cashier's or certified check for the amount of those costs, made payable to the "Hazardous Substance Superfund."

72. The payments that Respondents are required to make pursuant to the preceding two paragraphs shall be mailed to the following address:

EPA - Region II
Attn: Superfund Accounting
P.O. Box 360188M
Pittsburgh, PA 15251

Each check shall reference the name of the Site (the "Frontier Chemical Site") and the index number of this Order. A copy of each check and of the accompanying transmittal letter shall be sent to the EPA addressees identified in paragraph 49, above.

Force Majeure

73. "Force majeure", for purposes of this Order, is defined as any event arising from causes beyond the control of Respondents and of any entity controlling, controlled by, or under common control with Respondents, including their contractors and subcontractors, that delays the timely performance of any obligation under this Order notwithstanding Respondents' best efforts to avoid the delay. The requirement that Respondents exercise "best efforts to avoid the delay" includes using best efforts to anticipate any potential force majeure event and best efforts to address the effects of any potential force majeure event (1) as it is occurring and (2) following the potential force majeure event, such that the delay is minimized to the greatest extent practicable. Examples of events that are not force majeure events include, but are not limited to, increased costs or expenses of any work to be performed under this Order or the financial difficulty of Respondents to perform such work.

74. If any event occurs or has occurred that may delay the performance of any obligation under this Order, whether or not caused by a force majeure event, Respondents shall notify by telephone the EPA On-Scene Coordinator or, in his absence, the Chief of the Removal Action Branch of the Emergency and Remedial Response Division of EPA Region II within 48 hours of when Respondents knew or should have known that the event might cause a delay. In addition, Respondents shall notify EPA in writing within seven (7) calendar days after the date when Respondents first become aware or should have become aware of the circumstances which may delay or prevent performance. Such written notice shall be accompanied by all available and pertinent documentation, including third-party correspondence, and shall contain the following: (a) a description of the circumstances, and Respondents' rationale for interpreting such circumstances as being beyond their control (should that be Respondents' claim); (b) the actions (including pertinent dates) that Respondents have taken and/or plan to take to minimize any delay; and (c) the date by which or the time period within which Respondents propose to complete the delayed activities. Such notification shall not relieve Respondents of any of their obligations under this Order. Respondents' failure to timely and properly notify EPA as required by this paragraph shall constitute a waiver of Respondents' right to claim an event of force majeure. The burden of proving that an event constituting a force majeure has occurred shall rest with Respondents.

75. If EPA determines that a delay in performance of a requirement under this Order is or was attributable to a force

majeure, the time period for performance of that requirement shall be extended as deemed necessary by EPA. Such an extension shall not alter Respondents' obligation to perform or complete other tasks required by the Order which are not directly affected by the force majeure. Respondents shall use their best efforts to avoid or minimize any delay or prevention of performance of their obligations under this Order.

Stipulated and Statutory Penalties

76. If Respondents fail, without prior EPA approval, to comply with any of the requirements or time limits set forth in or established pursuant to this Order, and such failure is not excused under the terms of paragraphs 74 and 75 above (Force Majeure), Respondents shall, upon demand by EPA, pay a stipulated penalty to EPA in the amount indicated below:

A. For major deliverables, the following amounts:

<u>Days After Required Date</u>	<u>Stipulated Penalty</u>
1 to 7 days	\$ 750.00/day
8 to 15 days	\$ 1,500.00/day
16 to 25 days	\$ 3,000.00/day
26 days and beyond	\$ 7,500.00/day

Major deliverables are the selection of the Project Coordinator pursuant to paragraph 28 of this Order, the submission of the Work Plan pursuant to paragraph 33 and the resubmission of the Work Plan pursuant to paragraph 42.

B. For minor deliverables, the following amounts:

<u>Days After Required Date</u>	<u>Stipulated Penalty</u>
1 to 7 days	\$ 500.00/day
8 to 15 days	\$ 1,000.00/day
16 to 25 days	\$ 2,000.00/day
26 days and beyond	\$ 5,000.00/day

Minor deliverables are the selection of a contractor pursuant to paragraph 29 of this Order, the implementation of the Work Plan pursuant to paragraph 35 and off-site shipment notification pursuant to paragraph 63.

C. For monthly progress reports required by paragraph 46 of this Order, \$500 per day for each day after the progress report is due.

77. Any such penalty shall accrue as of the first day after the applicable deadline has passed and shall continue to accrue until the noncompliance is corrected or EPA notifies Respondents that it has determined that it will perform the tasks for which there

is non-compliance. Such penalty shall be due and payable thirty (30) days following receipt of a written demand from EPA. Payment of any such penalty to EPA shall be made by cashier's or certified check made payable to the "Hazardous Substance Superfund," with a notation of the index number of this Order, and shall be mailed to the address set forth in paragraph 72 above. A letter stating the basis for the penalty, the name and address of the Respondents, the name of the Site, and the EPA Region number shall accompany any such payment; a copy of the letter and the check shall be mailed to the EPA addressees listed in paragraph 49 above. Respondents shall pay interest on any amounts overdue under this paragraph. Such interest shall begin to accrue on the first day that the respective payment is overdue. Interest shall accrue at the rate of interest on investments of the Hazardous Substances Superfund, in accordance with Section 107(a) of CERCLA.

78. Even if violations are simultaneous, separate penalties shall accrue for separate violations of this Order. Penalties accrue and are assessed per violation per day. Penalties shall accrue regardless of whether EPA has notified Respondents of a violation or act of noncompliance. The payment of penalties shall not alter in any way Respondents' obligation to complete the performance of the Work required under this Order.

79. Notwithstanding any other provision of this Order, failure of Respondents to comply with any provision of this Order may subject Respondents to civil penalties of up to twenty-five thousand dollars (\$25,000) per violation per day, as provided in Section 106(b)(1) of CERCLA, 42 U.S.C. § 9606(b)(1), unless such failure to comply is excused under the terms of paragraphs 74 and 75 above. Respondents may also be subject to punitive damages in an amount at least equal to and not more than three times the amount of any costs incurred by the United States as a result of such failure to comply with this Order, as provided in Section 107(c)(3) of CERCLA, 42 U.S.C. § 9607(c)(3). Should Respondents violate this Order or any portion thereof, EPA may carry out the required actions unilaterally, pursuant to Section 104 of CERCLA, 42 U.S.C. § 9604, and/or may seek judicial enforcement of this Order pursuant to Section 106 of CERCLA, 42 U.S.C. § 9606.

Reservation of Rights

80. Nothing herein shall limit the power and authority of EPA or the United States to take, direct, or order all actions necessary to protect public health, welfare, or the environment or to prevent, abate, or minimize an actual or threatened release of hazardous substances, pollutants or contaminants, or hazardous or solid waste on, at, or from the Site. Further, nothing herein shall prevent EPA from seeking legal or equitable relief to enforce the terms of this Order, from taking other legal or equitable action as it deems appropriate, or from requiring the

Respondents in the future to perform additional activities pursuant to CERCLA or any other applicable law. Except as otherwise provided herein, EPA reserves the right to bring an action against Respondents under Section 107 of CERCLA, 42 U.S.C. § 9607, for recovery of any response costs incurred by the United States related to this Order or the Site and not reimbursed by Respondents.

81. In consenting to this Order, Respondents do not waive any rights, claims or defenses except as otherwise expressly waived by this Order.

Other Claims

82. By issuance of this Order, the United States and EPA assume no liability for injuries or damages to persons or property resulting from any acts or omissions of Respondents or Respondents' employees, agents, contractors, or consultants in carrying out any action or activity pursuant to this Order. The United States or EPA shall not be held out as or deemed a party to any contract entered into by the Respondents or their directors, officers, employees, agents, successors, representatives, assigns, contractors, or consultants in carrying out actions pursuant to this Order.

83. Nothing in this Order constitutes or shall be construed as a satisfaction of or release from any claim or cause of action against the Respondents or any person not a party to this Order for any liability that Respondents or other persons may have under CERCLA, other statutes, or the common law, including but not limited to any claims of the United States for injunctive relief, costs, damages, and interest under Sections 106(a) and 107 of CERCLA, 42 U.S.C. §§ 9606(a) and 9607. Nothing herein shall constitute a finding that Respondents are the only responsible parties with respect to the release and threatened release of hazardous substances at and from the Site.

84. Nothing in this Order shall affect any right, claim, interest, defense, or cause of action of any party hereto with respect to third parties.

85. Nothing in this Order shall be construed to constitute preauthorization under Section 111(a)(2) of CERCLA, 42 U.S.C. § 9611(a)(2), and 40 CFR § 300.700(d).

86. Respondents hereby waive any rights they may have to seek reimbursement pursuant to Sections 106(b)(2), 111 and/or 112 of CERCLA, 42 U.S.C. §§ 9606(b)(2), 9611, 9612, or any other provision of law, either directly or indirectly, from EPA or the Hazardous Substance Superfund of costs incurred by Respondents in complying with this Order.

Indemnification

87. Respondents agree to indemnify, save, and hold harmless the United States, its agencies, departments, officials, agents, contractors, subcontractors, employees, and representatives from any and all claims or causes of action arising from or on account of acts or omissions of Respondents, their employees, officers, directors, agents, servants, receivers, trustees, successors, assigns, or any other persons acting on behalf of Respondents or under their control, as a result of the fulfillment or attempted fulfillment of the terms and conditions of this Order by Respondents.

88. Respondents waive all claims against the United States for damages or reimbursement or for set-off of any payments made or to be made to the United States, arising from or on account of any contract, agreement, or arrangement between any one or more of Respondents and any person for performance of Work on or relating to the Site, including, but not limited to, claims on account of construction delays. In addition, Respondents shall indemnify and hold harmless the United States with respect to any and all claims for damages or reimbursement arising from or on account of any contract, agreement, or arrangement between any one or more of the Respondents and any person for performance of Work on or relating to the Site, including but not limited to, claims on account of construction delays.

89. Further, the Respondents agree to pay the United States all costs it incurs including, but not limited to, attorneys fees and other expenses of litigation and settlement arising from, or on account of, claims made against the United States based on acts or omissions of Respondents, their officers, directors, employees, agents, contractors, subcontractors, and any persons acting on their behalf or under their control, in carrying out activities pursuant to this Order.

Insurance

90. At least seven (7) days prior to commencing any Work at the Site, Respondents shall submit to EPA a certification that Respondents or their contractors and subcontractors have adequate insurance coverage or have indemnification for liabilities for injuries or damages to persons or property which may result from the activities to be conducted by or on behalf of Respondents pursuant to this Order. Respondents shall ensure that such insurance or indemnification is maintained for the duration of the Work required by this Order.

Financial Assurance

91. Respondents shall demonstrate their ability to complete the Work required by this Order and to pay all claims that arise from the performance of the Work by obtaining and presenting to EPA

within twenty (20) days of the effective date of this Order one of the following: (1) a performance bond; (2) a letter of credit; (3) a guarantee by a third party; or (4) internal financial information to allow EPA to determine that Respondents have sufficient assets available to perform the Work. Respondents shall demonstrate financial assurance in an amount no less than the estimated cost of the Work to be performed by the Respondents under this Order. If EPA determines that the financial assurances submitted by Respondents pursuant to this paragraph are inadequate, Respondents shall, within fifteen (15) days after receipt of notice of EPA's determination, obtain and present to EPA for approval additional financial assurances meeting the requirements of this paragraph.

Contribution Protection

92. At the effective date of this Order, with regard to claims for contribution against Respondents for matters addressed in this Order, the parties hereto agree that the Respondents are entitled to such protection from contribution actions as may be provided by Section 113(f)(2) of CERCLA, 42 U.S.C. §9613(f)(2).

93. Nothing in this Order precludes the United States or the Respondents from asserting any claims, causes of action or demands against any persons not parties to this Order for indemnification, contribution or cost recovery.

Modifications

94. This Order may be amended by mutual agreement of EPA and Respondents. Such amendments shall be in writing and shall have as their effective date that date on which such amendments are signed by EPA.

95. No informal advice, guidance, suggestion, or comment by EPA regarding reports, plans, specifications, schedules, or any other writing submitted by the Respondents shall relieve Respondents of their obligation to obtain such formal approval as may be required by this Order and to comply with all requirements of this Order unless it is formally modified.

Termination and Satisfaction

96. Upon a determination by EPA (following its receipt of the Final Report referred to in paragraph 50, above) that the Work required pursuant to this Order has been fully carried out in accordance with this Order, EPA will so notify Respondents in writing.

Effective Date and Effect of Consent

97. This Order shall become effective on the date that a fully executed copy of said Order is received by Jerry Fitzgerald

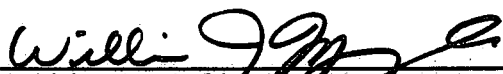
English, Esq. at Kerby, Cooper, English, Danis & Garvin, 480 Morris Avenue, Summit, NJ 07901-1583. All times for performance of actions or activities required herein will be calculated from said effective date.

98. By signing and taking actions under this Order, Respondents do not necessarily agree with the Findings of Fact and Conclusions of Law contained herein. Respondents do not admit any legal liability or waive any defenses or causes of action with respect to issues addressed in this Order, except as otherwise provided in this Order. However, Respondents agree not to contest the authority or jurisdiction of the Regional Administrator of EPA Region II to issue this Order, and Respondents also agree not to contest the validity or terms of this Order in any action to enforce its provisions.

99. Entech Corporation ("Entech") may choose to become a Respondent to this Order. Entech has entered into an asset purchase agreement with Frontier. One aspect of that purchase agreement is that, contingent upon the transfer of Frontier's facility permit or issuance of a RCRA Part B permit Entech will contribute \$1.7 million toward the Site. A portion of Entech's 1.7 million will be used to pay the remaining 50% of EPA's past costs; the balance shall be used to reimburse other Respondents for their payment to EPA of past costs or contributed toward performance of the Work as defined in paragraph 8(e). Entech may execute this Order and thereby voluntarily agree to be a Respondent in this action contingent on the transfer of the Frontier permits or issuance of a RCRA Part B permit at which point it shall be fully subject to its terms. The obligations assumed by Respondents to this Order, including Respondent's obligation under paragraph 70 to pay 50% of EPA's past costs are entirely independent of an in no way contingent upon Entech's participation.

100. Any funds received by EPA pursuant to the May 10, 1991 Guarantee Bond will be spent consistent with RCRA for activities related to the Site.

U.S. ENVIRONMENTAL PROTECTION AGENCY


WILLIAM J. MUSZYNSKI, P.E.
Acting Regional Administrator
U.S. Environmental Protection Agency
Region II

9/30/93
Date of Issuance